ABSTRACT OF THE DISCLOSURE:

A time frame switching method and system of data units that utilize a common time reference, which is divided into a plurality of contiguous periodic time frames. The system is designed to operate with time frames, which have a plurality of predefined time durations. The plurality of data units that are contained in each of the time frames are forwarded in a pipelined manner through the network switches. The system operates with high-speed wavelength division multiplexing (WDM) links, i.e., with multiple lambdas, having a plurality of transmission capacities. The outcome of this method is called fractional lambda switching with a plurality of time frame durations.

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